



KANSAS CORPORATION COMMISSION 1167607
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1167607

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	LB Exploration, Inc.
Well Name	Spriggs B 1
Doc ID	1167607

All Electric Logs Run

Compensated Neutron Density
Microresistivity
Dual Induction
Borehole Compensated Sonic

ALLIED OIL & GAS SERVICES, LLC 059812

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Medicine Lodge KS

DATE <i>04-12-13</i>	SEC <i>26</i>	TWP <i>33s</i>	RANGE <i>13W</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Spring B</i> WELL # <i>1</i>		LOCATION <i>160 & Oyp Lill Rd, south to</i>		COUNTY <i>Barber</i>	STATE <i>KS</i>		
OLD OR NEW (Circle one)		<i>Union Chapel, 1w, 1/2s, 6/4th</i>					

CONTRACTOR *Ninnescah*
 TYPE OF JOB *Conductor*
 HOLE SIZE *17 1/2* T.D.
 CASING SIZE *13 3/8* DEPTH *97*
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX *200** MINIMUM *-*
 MEAS. LINE SHOE JOINT *-NA*
 CEMENT LEFT IN CSG. *20'*
 PERFS.
 DISPLACEMENT *10 3/4 Bbls Fresh H₂O*

OWNER *LB Explo.*
 CEMENT AMOUNT ORDERED *100sx class A + 3% cc*

EQUIPMENT
 PUMP TRUCK CEMENTER *D. Felio*
 # *360-265* HELPER *J. Thinesch*
 BULK TRUCK
 # *356-290* DRIVER *J. Bowman*
 BULK TRUCK
 # DRIVER

COMMON class	<i>100sx</i>	@	<i>17.90</i>	<i>1790.00</i>
POZMIX		@		
GEL	<i>L</i>	@		
CHLORIDE	<i>4sx</i>	@	<i>64.00</i>	<i>256.00</i>
ASC		@		
HANDLING	<i>105 fr³</i>	@	<i>min.</i>	<i>380.00</i>
MILEAGE	<i>4.8 ton</i>	@	<i>15.20</i>	<i>187.20</i>
TOTAL				<i>2613.20</i>

REMARKS:
See Job Log
Mixed 100sx A + 3% cc -
Disp. w/ 10 3/4 Bbls Fresh
Cement Did Ck.

SERVICE

DEPTH OF JOB	<i>98</i>			
PUMP TRUCK CHARGE			<i>1512.25</i>	
EXTRA FOOTAGE		@		
MILEAGE	<i>15</i>	@	<i>270</i>	
MANIFOLD	<i>15</i>	@	<i>4.40</i>	
<i>Light + Vehicle</i>	<i>15</i>	@	<i>66.00</i>	
TOTAL				<i>1693.75</i>

CHARGE TO: *LB Explo.*
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

<i>None</i>	@	
	@	
	@	
	@	
	@	
TOTAL		

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____
 TOTAL CHARGES *4306.95*
 DISCOUNT *861.39* IF PAID IN 30 DAYS
3445.56

PRINTED NAME *Jason Barrigel*
 SIGNATURE *Jason Barrigel*

ALLIED OIL & GAS SERVICES, LLC

059815

Federal Tax I.D.# 20-3975804

PERMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Medicine Lodge KS

DATE <u>04-24-13</u>	SEC <u>26</u>	TWP <u>33</u>	RANGE <u>13w</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Spring B</u>	WELL # <u>1</u>	LOCATION <u>Union Chapel - 1w, 3/4s / e 1/2</u>			COUNTY <u>Barber</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Nimescah
 TYPE OF JOB Production Casing
 HOLE SIZE 7 7/8 I.D. 5166
 CASING SIZE 5 1/2 14" DEPTH 5165
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX / 500 # MINIMUM
 MEAS. LINE SHOE JOINT 42.12
 CEMENT LEFT IN CSG. 42'
 PERFS.
 DISPLACEMENT 128 Bbls 2% KCL Water

OWNER LB Explo.
 CEMENT AMOUNT ORDERED 50sx 60' 40' 4 1/2" @ 175
5x class A - ASC + 5# Kalsol + 5% FL-160
15gals Capro & 12 Bbls ASF
 COMMON Class A 30sx @ 17.90 537.00
 POZMIX 20sx @ 9.35 187.00
 GEL 2sx @ 23.70 46.80
 CHLORIDE @
 ASC class A 175sx @ 20.90 3657.50
 @
Kalsol 875# @ .98 857.50
 @
FL-160 82# @ 18.70 1540.50
 @
ASF 12 Bbls @ 58.70 704.40
 @
Capro 15gals @ 34.40 516.00
 HANDLING 277.93 FL @ 2.43 684.29
 MILEAGE 12.03 @ 15miles 280.50
 TOTAL 9214.70

EQUIPMENT
 PUMP TRUCK CEMENTER D. Felio
 # 558-555 HELPER S. Paddy
 BULK TRUCK
 # 421-250 DRIVER J. Bower
 BULK TRUCK
 # DRIVER

REMARKS:
- See Job Log

Mix 175sx A ASC - Did Bump Flt
Release PSI - Floats Td Hold
THX

SERVICE
 DEPTH OF JOB 5165'
 PUMP TRUCK CHARGE 3099.25
 EXTRA FOOTAGE @
 MILEAGE 15 @ 7.70 115.50
 MANIFOLD hand rental @ 275.00
Light Vehicle 15 @ 4.40 66.00
 TOTAL 3555.75

CHARGE TO: LB Explo.
 STREET
 CITY STATE ZIP

PLUG & FLOAT EQUIPMENT
 1- AFU Float Shoe @ 408.33
 1- Catcl down Plug ASF @ 324.09
 10- tumblers @ 93.60 936.00
 TOTAL 1668.42

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cement and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Michael Petermann
 SIGNATURE [Signature]

SALES TAX (If Any)
 TOTAL CHARGES 14438.63
 DISCOUNT 2887.12 IF PAID IN 30 DAYS
 Net 11550.91



DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

21352nd Rd Holyrood KS 67450+9021

ATTN: Steven Peterman

Spriggs B#1

26-33-13 Barber

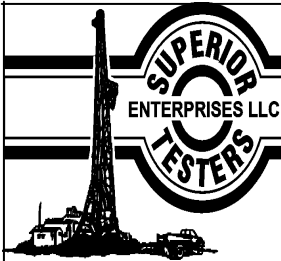
Start Date: 2013.04.18 @ 19:12:00

End Date: 2013.04.19 @ 02:30:00

Job Ticket #: 17452 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2013.04.26 @ 11:05:06



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17452 **DST#: 1**
 Test Start: 2013.04.18 @ 19:12:00

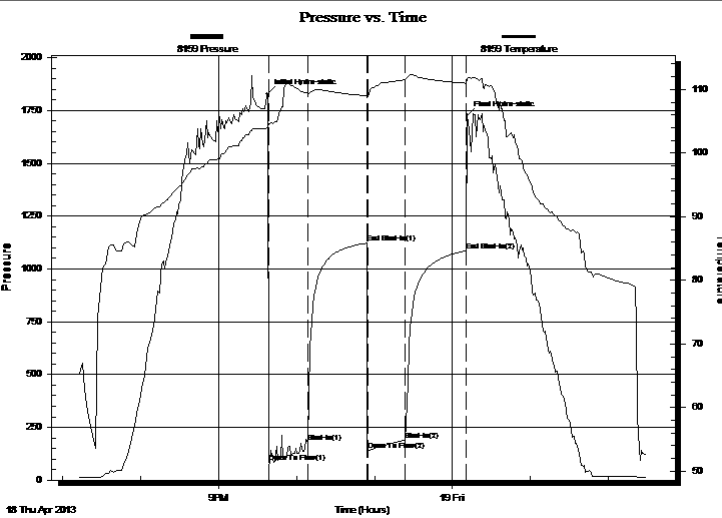
GENERAL INFORMATION:

Formation: **Snyderville**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:38:30
 Time Test Ended: 02:30:00
 Interval: **3759.00 ft (KB) To 3824.00 ft (KB) (TVD)**
 Total Depth: 3759.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-130
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8159

Press @ Run Depth: 189.36 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.18 End Date: 2013.04.19 Last Calib.: 2013.04.18
 Start Time: 19:13:00 End Time: 02:30:00 Time On Btm: 2013.04.18 @ 21:37:30
 Time Off Btm: 2013.04.19 @ 00:11:30

TEST COMMENT: 1st Opening 30 Minutes-Fair blow built bottom of bucket in 20 minutes
 1st Shut-in 45 Minutes-No blow back
 2nd Opening 30 Minutes-Fair blow built bottom of bucket in 20 minutes
 2nd Shut-in 45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1828.94	104.17	Initial Hydro-static
1	84.85	104.70	Open To Flow (1)
31	178.01	109.36	Shut-In(1)
77	1121.93	109.06	End Shut-In(1)
78	140.43	108.96	Open To Flow (2)
106	189.36	111.53	Shut-In(2)
153	1085.09	110.99	End Shut-In(2)
154	1727.24	111.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
210.00	water	2.95
0.00	chlorides 60,000 resistivity.1 @55degrees	0.00

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17452 **DST#: 1**
 Test Start: 2013.04.18 @ 19:12:00

Tool Information

Drill Pipe:	Length: 3769.00 ft	Diameter: 3.80 inches	Volume: 52.87 bbl	Tool Weight:	1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 52.87 bbl</u>	Tool Chased	6.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	51000.00 lb
Depth to Top Packer:	3759.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	65.00 ft				
Tool Length:	85.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: Shale packer ruined

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3744.00	
Hydraulic Tool	5.00			3749.00	
Packer	5.00			3754.00	20.00 Bottom Of Top Packer
Packer	5.00			3759.00	
Anchor	5.00			3764.00	
Change Over Sub	0.75			3764.75	
Drill Pipe	31.50			3796.25	
Change Over Sub	0.75			3797.00	
Anchor	22.00			3819.00	
Recorder	1.00	6731	Inside	3820.00	
Recorder	1.00	8159	Outside	3821.00	
Bullnose	3.00			3824.00	65.00 Bottom Packers & Anchor

Total Tool Length: 85.00



DRILL STEM TEST REPORT

FLUID SUMMARY

LB Exploration

26-33-13 Barber

21352nd Rd Holyrood KS 67450+9021

Spriggs B#1

Job Ticket: 17452

DST#: 1

ATTN: Steven Peterman

Test Start: 2013.04.18 @ 19:12:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
210.00	water	2.946
0.00	chlorides 60,000 resistivity .1 @ 55degrees	0.000

Total Length: 210.00 ft Total Volume: 2.946 bbl

Num Fluid Samples: 0

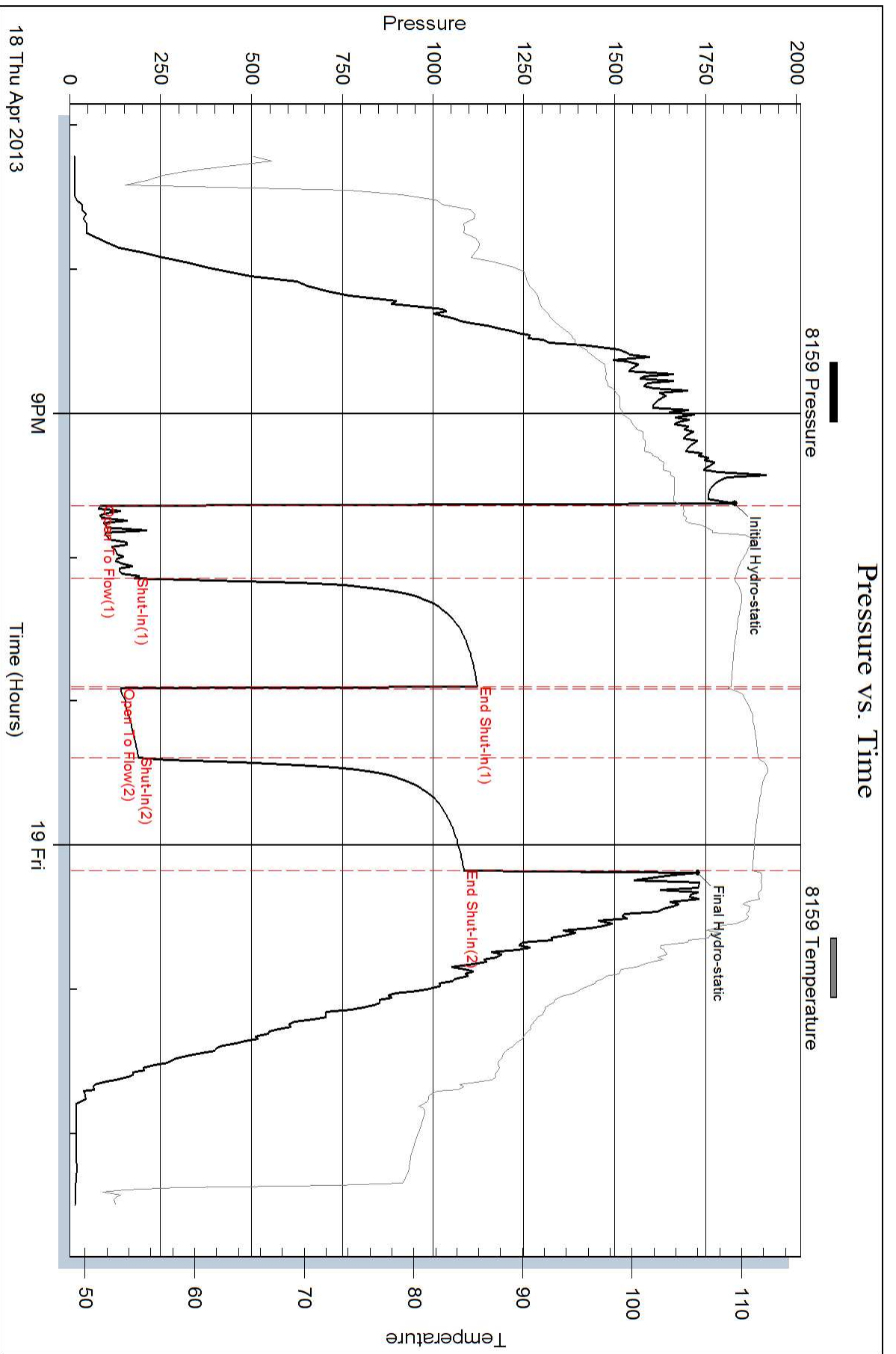
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: ruined shale packer/chlorides 60,000 resistivity .1 @ 55 degrees





DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

21352nd Rd Holyrood KS 67450+9021

ATTN: Steven Peterman

Spriggs B#1

26-33-13 Barber

Start Date: 2013.04.19 @ 16:30:00

End Date: 2013.04.19 @ 23:31:00

Job Ticket #: 17453 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2013.04.26 @ 11:07:04



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17453 **DST#: 2**
 Test Start: 2013.04.19 @ 16:30:00

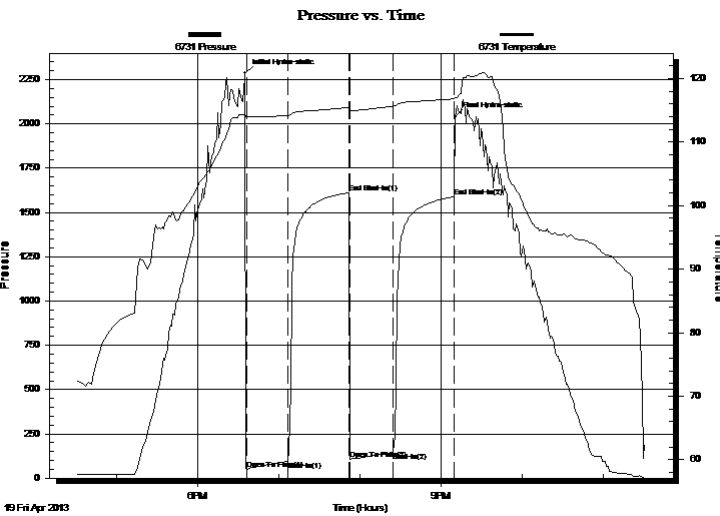
GENERAL INFORMATION:

Formation: **Swope**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:36:00
 Time Test Ended: 23:31:00
Interval: 4377.00 ft (KB) To 4407.00 ft (KB) (TVD)
 Total Depth: 4407.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6731

Press @ RunDepth: 145.82 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.19 End Date: 2013.04.19 Last Calib.: 2013.04.19
 Start Time: 16:31:00 End Time: 23:31:00 Time On Btm: 2013.04.19 @ 18:35:00
 Time Off Btm: 2013.04.19 @ 21:10:30

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 2 inches from bottom of bucket in 30 minutes
 1st Shut-in 45 Minutes No blow back
 2nd Opening 30 Minutes-Weak blow built 7 inches into bucket w ater in 30 minutes
 2nd Shut-in 45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2285.47	114.51	Initial Hydro-static
1	52.42	114.05	Open To Flow (1)
32	95.24	114.18	Shut-In(1)
77	1612.21	115.46	End Shut-In(1)
78	108.10	115.02	Open To Flow (2)
110	145.82	115.62	Shut-In(2)
155	1589.34	116.82	End Shut-In(2)
156	2039.37	116.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	water 40% mud 60% water	2.52
0.00	chlorides 100,000 resistivity .6 @ 70 deg F	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17453 **DST#: 2**
 Test Start: 2013.04.19 @ 16:30:00

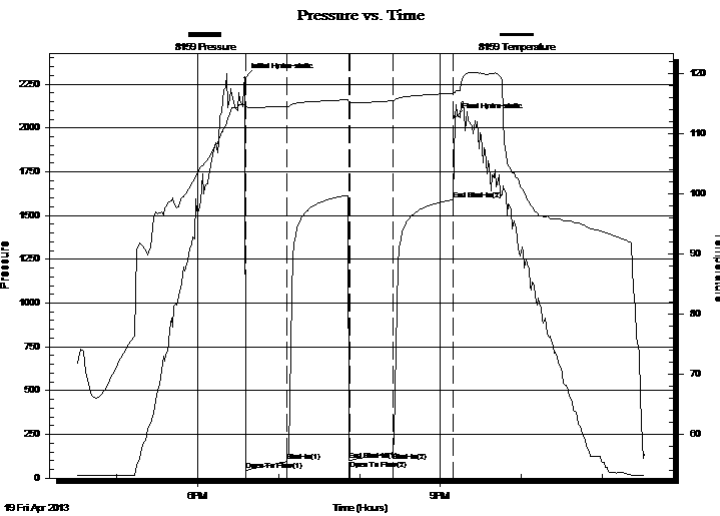
GENERAL INFORMATION:

Formation: **Swope**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:36:00
 Time Test Ended: 23:31:00
Interval: 4377.00 ft (KB) To 4407.00 ft (KB) (TVD)
 Total Depth: 4407.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8159

Press @ RunDepth: 1590.41 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.19 End Date: 2013.04.19 Last Calib.: 2013.04.19
 Start Time: 16:31:00 End Time: 23:31:30 Time On Btm: 2013.04.19 @ 18:35:00
 Time Off Btm: 2013.04.19 @ 21:10:30

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 2 inches from bottom of bucket in 30 minutes
 1st Shut-in 45 Minutes No blow back
 2nd Opening 30 Minutes-Weak blow built 7 inches into bucket w ater in 30 minutes
 2nd Shut-in 45 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2284.78	114.61	Initial Hydro-static
1	44.26	114.47	Open To Flow (1)
32	95.23	114.55	Shut-In(1)
77	101.08	115.27	End Shut-In(1)
78	101.80	115.19	Open To Flow (2)
110	145.35	115.49	Shut-In(2)
155	1590.41	116.76	End Shut-In(2)
156	2060.20	116.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	water 40% mud 60% water	2.52
0.00	chlorides 100,000 resistivity .6 @ 70 deg	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17453 **DST#: 2**
 Test Start: 2013.04.19 @ 16:30:00

Tool Information

Drill Pipe:	Length: 4362.00 ft	Diameter: 3.80 inches	Volume: 61.19 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 61.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4377.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			4354.00	
Hydraulic Tool	5.00			4359.00	
Jars	6.00			4365.00	
Safety Joint	2.00			4367.00	
Packer	5.00			4372.00	28.00 Bottom Of Top Packer
Packer	5.00			4377.00	
Anchor	25.00			4402.00	
Recorder	1.00	6731	Inside	4403.00	
Recorder	1.00	8159	Outside	4404.00	
Bullnose	3.00			4407.00	30.00 Bottom Packers & Anchor
Total Tool Length:	58.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

LB Exploration

26-33-13 Barber

21352nd Rd Holyrood KS 67450+9021

Spriggs B#1

Job Ticket: 17453

DST#: 2

ATTN: Steven Peterman

Test Start: 2013.04.19 @ 16:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 10.58 in³

Resistivity: ohm.m

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	w ater 40%mud 60%w ater	2.525
0.00	chlorides 100,000 ressitivity .6@70degre	0.000

Total Length: 180.00 ft Total Volume: 2.525 bbl

Num Fluid Samples: 0

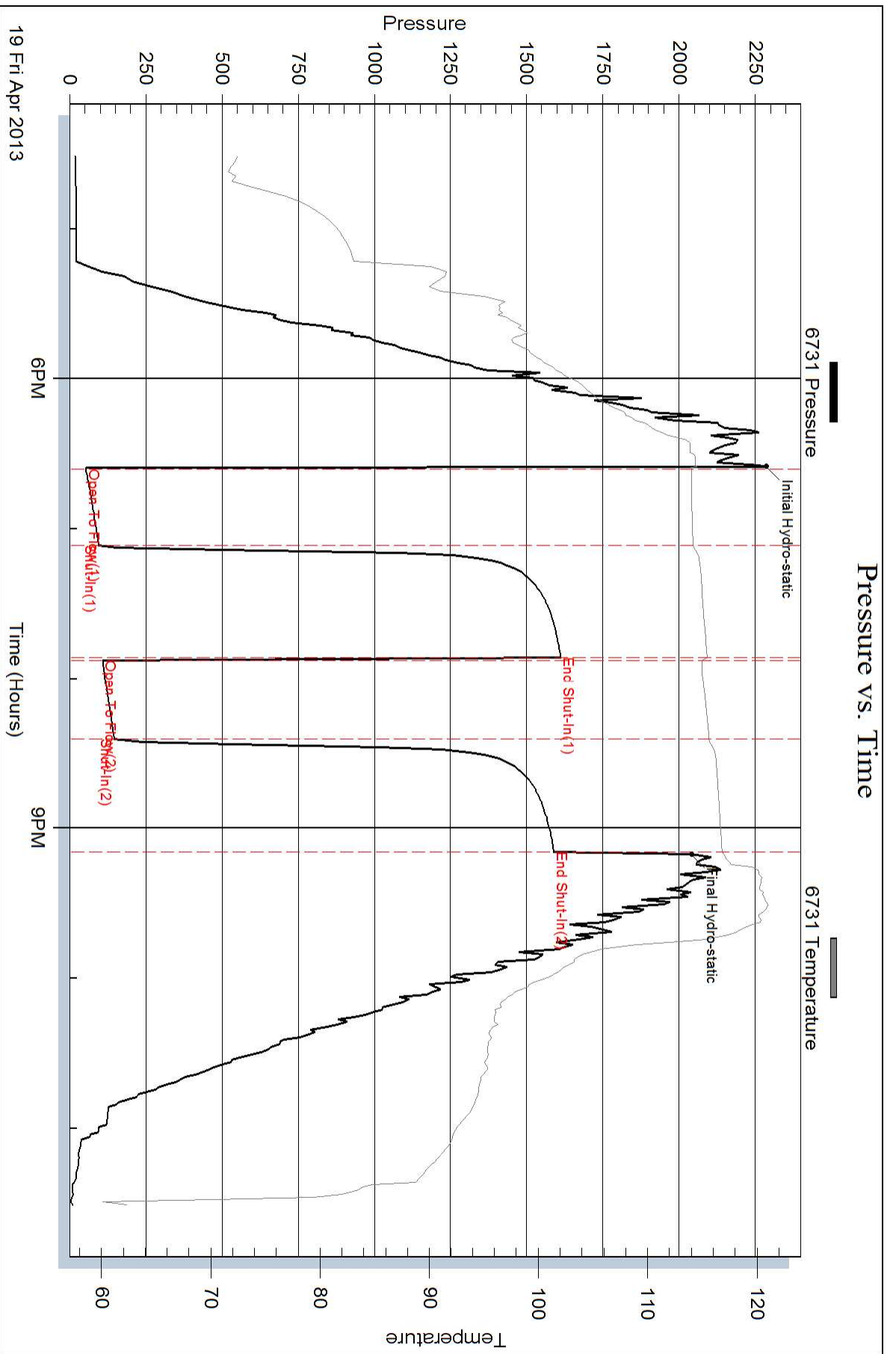
Num Gas Bombs: 0

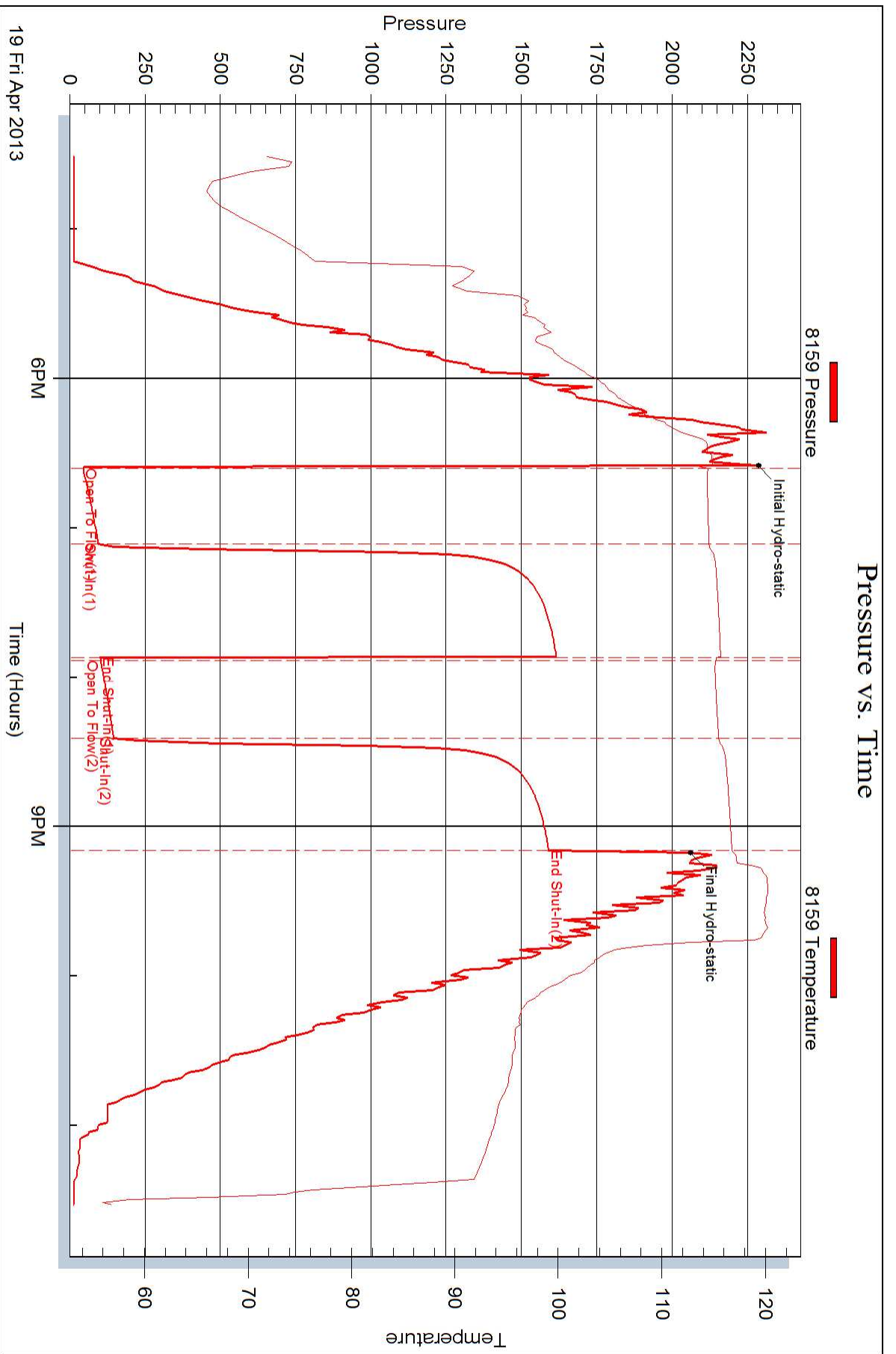
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

21352nd Rd Holyrood KS 67450+9021

ATTN: Steven Peterman

Spriggs B#1

26-33-13 Barber

Start Date: 2013.04.21 @ 20:33:00

End Date: 2013.04.22 @ 03:16:00

Job Ticket #: 17454 DST #: 3

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2013.04.26 @ 11:07:50

LB Exploration
26-33-13 Barber
Spriggs B#1
DST # 3
Viola
2013.04.21



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17454 **DST#: 3**
 Test Start: 2013.04.21 @ 20:33:00

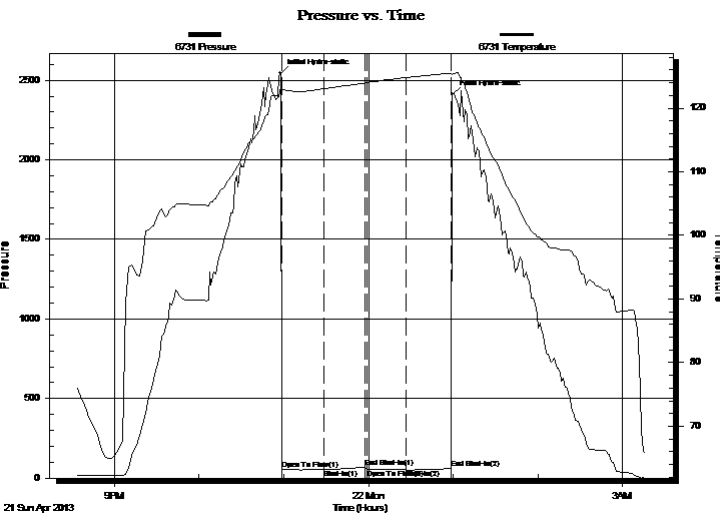
GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:58:30
 Time Test Ended: 03:16:00
 Interval: **4842.00 ft (KB) To 4888.00 ft (KB) (TVD)**
 Total Depth: 4888.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6731

Press @ Run Depth: 52.16 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.21 End Date: 2013.04.22 Last Calib.: 2013.04.22
 Start Time: 20:34:00 End Time: 03:16:00 Time On Btm: 2013.04.21 @ 22:57:30
 Time Off Btm: 2013.04.22 @ 00:59:30

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 1/2 inch into bucket w ater in 30 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak surge did not build
 2nd Shut-in 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2543.24	123.36	Initial Hydro-static
1	57.91	122.92	Open To Flow (1)
31	53.10	123.05	Shut-In(1)
60	69.15	123.96	End Shut-In(1)
61	53.85	123.99	Open To Flow (2)
89	52.16	124.80	Shut-In(2)
121	60.12	125.50	End Shut-In(2)
122	2411.06	125.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	mud	0.03

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17454 **DST#: 3**
 Test Start: 2013.04.21 @ 20:33:00

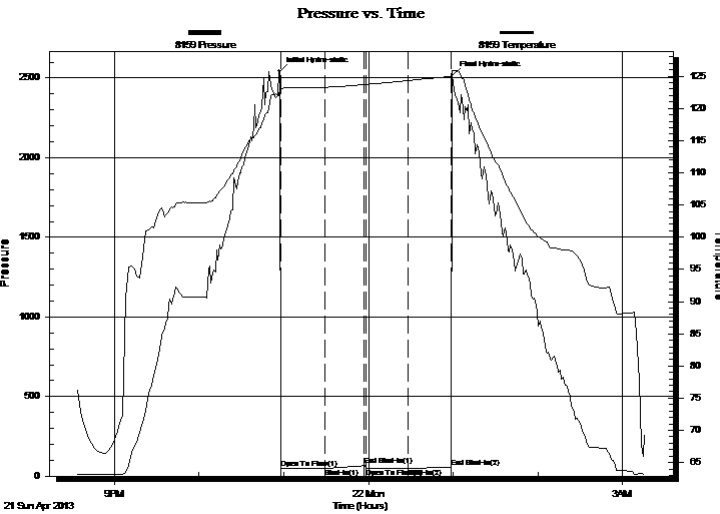
GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:58:30
 Time Test Ended: 03:16:00
Interval: 4842.00 ft (KB) To 4888.00 ft (KB) (TVD)
 Total Depth: 4888.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8159

Press @ RunDepth: 57.56 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.21 End Date: 2013.04.22 Last Calib.: 2013.04.22
 Start Time: 20:34:00 End Time: 03:16:00 Time On Btm: 2013.04.21 @ 22:57:00
 Time Off Btm: 2013.04.22 @ 00:59:30

TEST COMMENT: 1st Opening 30 Minutes-Very weak surface blow built 1/2 inch into bucket w ater in 30 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak surge did not build
 2nd Shut-in 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2542.81	123.09	Initial Hydro-static
1	48.21	123.15	Open To Flow (1)
32	49.40	123.29	Shut-In(1)
60	66.47	123.70	End Shut-In(1)
61	48.33	123.71	Open To Flow (2)
91	48.44	124.33	Shut-In(2)
122	57.56	124.97	End Shut-In(2)
123	2516.66	125.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	mud	0.03

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17454 **DST#: 3**
 Test Start: 2013.04.21 @ 20:33:00

Tool Information

Drill Pipe:	Length: 4838.00 ft	Diameter: 3.80 inches	Volume: 67.86 bbl	Tool Weight:	1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 67.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	4842.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	46.00 ft				
Tool Length:	66.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: ruined shale packer

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			4827.00	
Hydraulic Tool	5.00			4832.00	
Packer	5.00			4837.00	20.00 Bottom Of Top Packer
Packer	5.00			4842.00	
Anchor	41.00			4883.00	
Recorder	1.00	6731	Inside	4884.00	
Recorder	1.00	8159	Outside	4885.00	
Bullnose	3.00			4888.00	46.00 Bottom Packers & Anchor

Total Tool Length: 66.00



DRILL STEM TEST REPORT

FLUID SUMMARY

LB Exploration

26-33-13 Barber

21352nd Rd Holyrood KS 67450+9021

Spriggs B#1

Job Ticket: 17454

DST#: 3

ATTN: Steven Peterman

Test Start: 2013.04.21 @ 20:33:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	mud	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

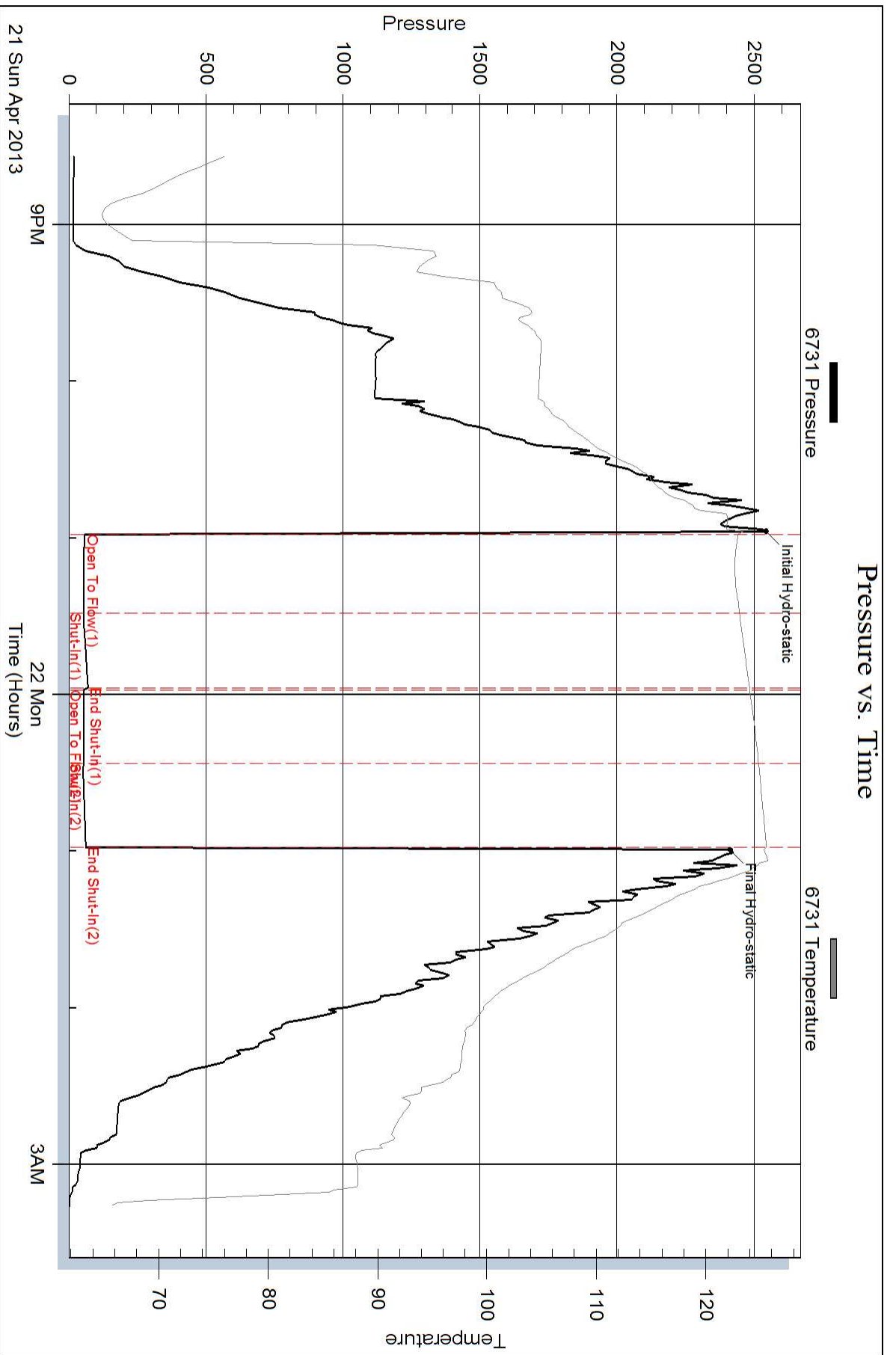
Num Gas Bombs: 0

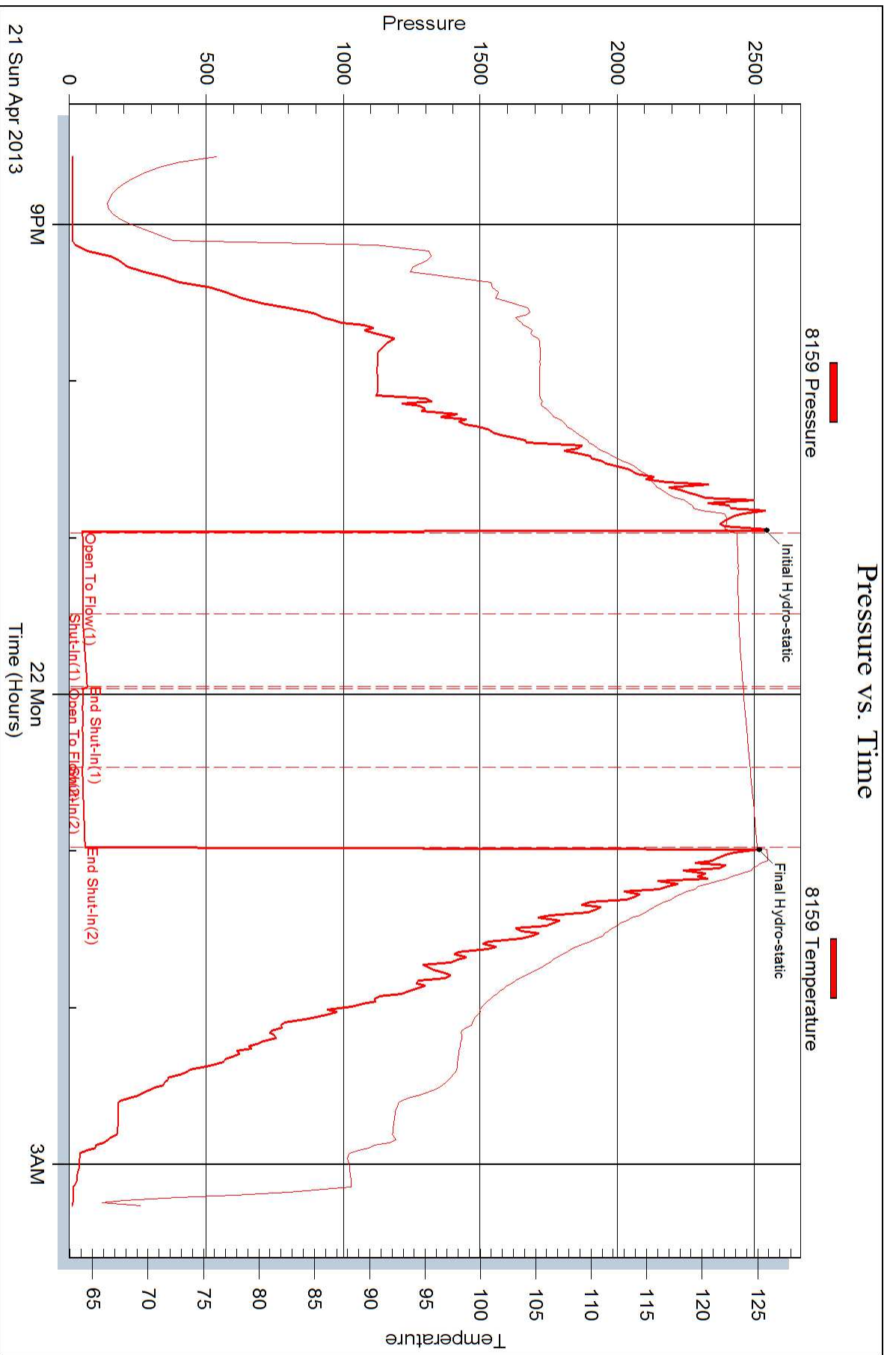
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: ruined shale packer







DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

21352nd Rd Holyrood KS 67450+9021

ATTN: Steven Peterman

Spriggs B#1

26-33-13 Barber

Start Date: 2013.04.24 @ 21:07:00

End Date: 2013.04.25 @ 07:38:00

Job Ticket #: 17455 DST #: 4

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2013.04.26 @ 11:08:41

LB Exploration
26-33-13 Barber
Spriggs B#1
DST # 4
Penn
2013.04.24



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17455 **DST#: 4**
 Test Start: 2013.04.24 @ 21:07:00

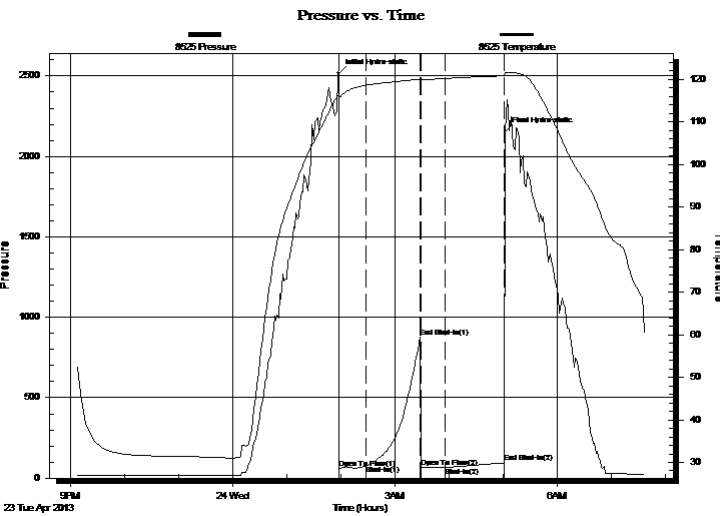
GENERAL INFORMATION:

Formation: **Penn**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:58:30
 Time Test Ended: 07:38:00
 Interval: **4521.00 ft (KB) To 4570.00 ft (KB) (TVD)**
 Total Depth: 5164.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Straddle (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-130
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8525

Press @ RunDepth: 69.15 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.23 End Date: 2013.04.24 Last Calib.: 2013.04.24
 Start Time: 21:08:00 End Time: 07:38:00 Time On Btm: 2013.04.24 @ 01:57:30
 Time Off Btm: 2013.04.24 @ 05:03:00

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 2 1/2 inches into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow died off
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2517.02	116.24	Initial Hydro-static
1	59.66	115.88	Open To Flow (1)
31	79.17	118.69	Shut-In(1)
91	879.11	120.14	End Shut-In(1)
92	67.12	119.95	Open To Flow (2)
118	69.15	120.26	Shut-In(2)
185	95.84	120.88	End Shut-In(2)
186	2156.45	121.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud	0.42

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17455 **DST#: 4**
 Test Start: 2013.04.24 @ 21:07:00

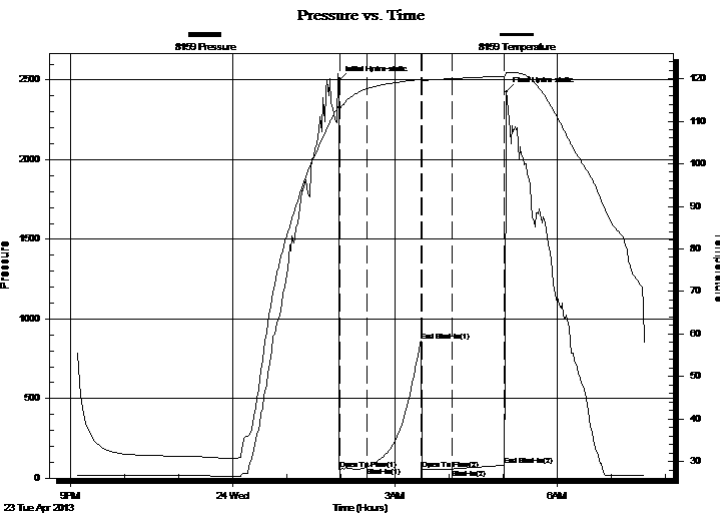
GENERAL INFORMATION:

Formation: **Penn**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:58:30
 Time Test Ended: 07:38:00
Interval: 4521.00 ft (KB) To 4570.00 ft (KB) (TVD)
 Total Depth: 5164.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Straddle (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Pratt-130
 Reference Elevations: 1566.00 ft (KB)
 1554.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8159

Press @ RunDepth: 82.64 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.04.23 End Date: 2013.04.24 Last Calib.: 2013.04.24
 Start Time: 21:08:00 End Time: 07:38:30 Time On Btm: 2013.04.24 @ 01:58:00
 Time Off Btm: 2013.04.24 @ 05:04:00

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 2 1/2 inches into water in 30 minutes
 1st Shut-in 60 Minutes-No blow back
 2nd Opening 30 Minutes-Very weak blow died off
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2499.47	113.72	Initial Hydro-static
1	52.70	113.19	Open To Flow (1)
31	69.90	117.62	Shut-In(1)
91	861.68	119.83	End Shut-In(1)
93	56.17	119.58	Open To Flow (2)
126	57.77	120.00	Shut-In(2)
184	82.64	120.56	End Shut-In(2)
186	2424.73	121.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	mud	0.42

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

LB Exploration
 21352nd Rd Holyrood KS 67450+9021
 ATTN: Steven Peterman

26-33-13 Barber
Spriggs B#1
 Job Ticket: 17455 **DST#: 4**
 Test Start: 2013.04.24 @ 21:07:00

Tool Information

Drill Pipe:	Length: 4526.00 ft	Diameter: 3.80 inches	Volume: 63.49 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 63.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4526.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	4560.00 ft			
Interval between Packers:	34.00 ft			
Tool Length:	664.00 ft			
Number of Packers:	4	Diameter: 6.75 inches		

Tool Comments: Ruined packer

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
shut in tool	5.00			4516.00	
HYD S.I. Tool	5.00			4521.00	
Packer	5.00			4526.00	15.00 Bottom Of Top Packer
packer	5.00			4531.00	
anchor	26.00			4557.00	
recorder	1.00			4558.00	
recorder	1.00			4559.00	
Blank Off Sub	1.00			4560.00	34.00 Tool Interval
Packer	5.00			4565.00	
handle sub	5.00			4570.00	
packer	5.00			4575.00	
Tail pipe	596.00			5171.00	
recorder	1.00			5172.00	
Bullnose	3.00			5175.00	615.00 Bottom Packers & Anchor

Total Tool Length: 664.00



DRILL STEM TEST REPORT

FLUID SUMMARY

LB Exploration

26-33-13 Barber

21352nd Rd Holyrood KS 67450+9021

Spriggs B#1

Job Ticket: 17455

DST#: 4

ATTN: Steven Peterman

Test Start: 2013.04.24 @ 21:07:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	mud	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Ruined packer

